

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/000301

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D01H1/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 D01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3 834 146 A (NESSLER A ET AL) 10 September 1974 (1974-09-10) cited in the application	1-38,41, 43,47,48
A	column 3, line 43 -column 4, line 59; figures 1,2	39,42
Y	US 5 706 642 A (HASELWANDER JACK G) 13 January 1998 (1998-01-13)	1-38,41, 43,47,48
A	column 3, line 20 -column 5, line 57; figures 1,2,4	39,42
A	EP 0 469 455 A (MENEGATTO CARLO) 5 February 1992 (1992-02-05)	1
A	column 2, line 2-48; figure 1	
A	GB 700 628 A (JOHNSON STEEL & WIRE INC) 9 December 1953 (1953-12-09)	1
	page 12, line 54-63; claim 1	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

15 June 2004

Date of mailing of the international search report

24/06/2004

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3834146	A	10-09-1974	FR 2085531 A1 CH 527296 A DE 2018910 A1 GB 1291306 A JP 49014410 B	24-12-1971 31-08-1972 04-11-1971 04-10-1972 08-04-1974
US 5706642	A	13-01-1998	WO 9815677 A1	16-04-1998
EP 0469455	A	05-02-1992	IT 1243480 B AT 118560 T DE 69107367 D1 DE 69107367 T2 EP 0469455 A1 US 5237805 A	15-06-1994 15-03-1995 23-03-1995 12-10-1995 05-02-1992 24-08-1993
GB 700628	A	09-12-1953	NONE	